

出國報告(出國類別：洽公)

洽訪 8749111E00400 及 8749111E01500
合約廠商執行進度查核及辦理稽催

服務機關：台電核火工處

姓名職稱：賴松文 一般工程師

派赴國家：日本

出國期間：97年11月05日至97年11月11日

報告日期：97年12月08日

行政院及所屬各機關出國報告審核表

出國報告名稱：洽訪龍門計畫 8749111E00400 及 8749111E01500 合約廠商執行進度查核及辦理稽催	
出國計畫主辦機關名稱：台灣電力公司核能火力發電工程處	
出國人姓名/職稱/服務單位：賴松文/一般工程師/龍門計畫採購室	
出國計畫 主辦機關 審核意見	<input checked="" type="checkbox"/> 1.依限繳交出國報告 <input checked="" type="checkbox"/> 2.格式完整 <input checked="" type="checkbox"/> 3.內容充實完備 <input type="checkbox"/> 4.建議具參考價值 <input type="checkbox"/> 5.送本機關參考或研辦 <input type="checkbox"/> 6.送上級機關參考 <input type="checkbox"/> 7.退回補正，原因： <input type="checkbox"/> ①不符核定出國計畫 <input type="checkbox"/> ②以外文撰寫或僅以所蒐集外文資料為內容 <input type="checkbox"/> ③內容空洞簡略 <input type="checkbox"/> ④未依行政院所屬各機關出國報告規格辦理 <input type="checkbox"/> ⑤未於資訊網登錄提要資料及傳送出國報告電子檔 <input type="checkbox"/> 8.其他處理意見：
層轉機關 審核意見	<input type="checkbox"/> 同意主辦機關審核意見 <input type="checkbox"/> 全部 <input type="checkbox"/> 部分 _____ (填寫審核意見編號) <input type="checkbox"/> 退回補正，原因： _____ (填寫審核意見編號) <input type="checkbox"/> 其他處理意見

說明：

- 一、出國計畫主辦機即層轉機關時，不需填寫「層轉機關審核意見」。
- 二、各機關可依需要自行增列審核項目內容，出國報告審核完畢本表請自行保存。
- 三、審核作業應於出國報告提出後二個月內完成。

報告人



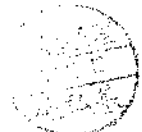
直接
主管



單位
主管



總經理
副總經理



行政院及所屬各機關出國報告提要

出國報告名稱：洽訪 8749111E00400 及 8749111E01500 合約廠商執行進度查核及辦理稽催

頁數 19 含附件：■是□否

出國計畫主辦機關/聯絡人/電話 台灣電力公司核能火力發電工程處

出國人員姓名/服務機關/單位/職稱/電話

賴松文 台灣電力公司核能火力發電工程處龍門計畫採購室

一般工程師 電話：(02)2322-9459

出國類別：□1.考察□2.進修□3.研究□4.實習■5.其他(洽公)

出國期間：97 年 11 月 05 日至 97 年 11 月 11 日

出國地區：日本

報告日期：97 年 12 月 08 日

分類號/目

關鍵詞：

內容摘要：(二百至三百字)

- 1、龍門計畫 8749111E00400 (保安系統)合約廠商為日商 Japan Nuclear Security System Co., Ltd.該合約一號機部分器材目前正陸續交運至工地，安裝承包商已進駐工地進行安裝工作。由於本公司先前所訂之安裝完成日期已無法達成，故廠商要求本公司提供相關廠房建築完工日期及本合約新的安裝完成日期供其執行工作。另該合約廠商已針對設計變更及工期展延修約案提送報價書，由於廠商所提報價書與本公司之認知尚有落差，目前正與廠商交涉澄清中，故擬利用本次出國計畫赴合約廠商實地瞭解其履約現況並洽商有關設計變更及工期展延之修約事宜。
- 2、龍門計畫 8749111E01500 (主變壓器)合約廠商為日商 Mitsubishi Electric Corporation，該合約一號機主變壓器安裝工作已於今(2008)年 6 月完成，二號機目前設備製造中，預計將於 2008 年 11 月中進場，2009 年 4 月中安裝完成。另有關廠商因本公司展延安裝完工日期而向本公司提請支付額外費用事宜，目前本公司已與廠商開過數次協商會議，尚未就金額部份達成協議。擬利用本次出國計畫赴該合約廠商進行洽商及瞭解實際情況，以期修約工作能儘速順利完成。

壹、目的

洽訪龍門計畫 8749111E00400 及 8749111E01500 合約廠商執行進度查核及辦理稽催。

說明：

(一)龍門計畫 8749111E00400 (保安系統)合約廠商為日商 Japan Nuclear Security System Co., Ltd.該合約一號機部分器材目前正陸續交運至工地，安裝承包商已進駐工地進行安裝工作。由於本公司先前所訂之安裝完成日期已無法達成，故廠商要求本公司提供相關廠房建築完工日期及本合約新的安裝完成日期供其執行工作。另該合約廠商已針對設計變更及工期展延修約案提送報價書，由於廠商所提報價書與本公司之認知尚有落差，目前正與廠商交涉澄清中，故擬利用本次出國計畫赴合約廠商實地瞭解其履約現況並洽商有關設計變更及工期展延之修約事宜。

(二)龍門計畫 8749111E01500 (主變壓器)合約廠商為日商 Mitsubishi Electric Corporation，該合約一號機主變壓器安裝工作已於今(2008)年 6 月完成，二號機目前設備製造中，預計將於 2008 年 11 月中進場，2009 年 4 月中安裝完成。另有關廠商因本公司展延安裝完工日期而向本公司提請支付額外費用事宜，目前本公司已與廠商開過數次協商會議，尚未就金額部份達成協議。擬利用本次出國計畫赴該合約廠商進行洽商及瞭解實際情況，以期修約工作能儘速順利完成。

(三)基於上述理由，本次奉派赴上述二合約廠商，洽視下列事項：

- 1、保安系統設備合約廠商之履約現況並洽商有關日後針對設計變更及工期展延之修約事宜。
- 2、主變壓器合約廠商因核四工期展延提請支付額外費用之相關佐證文件及其設備保固期展延計畫。
- 3、上述二廠商之經營現況及討論合約履行中尚待解決之問題。

貳、過程

一、出國行程

97.11.05	往程 (台北-東京)
97.11.06~11.07	Japan Nuclear Security System Co., Ltd.
97.11.08~11.10	Mitsubishi Electric Corporation
97.11.11	返程 (東京-台北)

全程共計 7 天

二、洽辦業務辦理情形

(一)、Japan Nuclear Security System Co., Ltd. (JNSS)部份：

- 1、JNSS 成立於 1977 年，係為日本最大安全防護公司 SECOM 及多家電力公司(包括東京電力及關西電力等)所投資成立之核能電廠保安系統公司，該公司之營業佔日本核能電廠保安系統之百分之七十八，其服務範圍除了設備之設計、製造及安裝外，尚包括保安人員之訓練及電廠之防護。本公司龍門計畫保安系統之設備製造及安裝係 JNSS 首次向國外發展及進軍。(JNSS 公司之 Profile 如附件一)。
- 2、本次洽訪 JNSS，先由該公司進行簡報，之後並與該公司 Mr. Makiguchi，Mr. Takase 及 Mr. Yoshimura 等人會談，就保安系統合約設計變更及工期展延增加費用(Cost Impact)及安裝工期等事宜進行討論。JNSS 表示由於原合約中所訂之一號機安裝完成日期(2008 年 8 月 15 日)目前已過期，且本公司於今年 9 月所提供予 JNSS 之的施工安裝工期經該公司審查結果認為不可行，在未談妥 Cost Impact 相關費用及龍門工地廠房完工狀況未改善前，該公司拒絕與本公討論安裝時程事宜，且將撤回其在工地施工安裝保安系統之人員。有關此點，已在當場向 JNSS 解釋，依據合約 1.24.1 Suspension for Convenience 條款之規定，JNSS 並無片面停工之權利，否則將視同違約。故請 JNSS 仍須繼續進行履約工作，若有任何之求償或主張，則須依合約相關條款辦理，且安裝工作仍應繼續進行。
- 3、有關設計變更及工期展延增加費用(Cost Impact)求償事宜，JNSS 已於今年 5 月提出 Cost Impact Proposal，由於 JNSS 求償之金額約為合約金額之二倍，本公司審查結果認為不合理，故已將審查意見函告廠商。截至目前為止，已進行了三個回合之書面交涉與澄清，目前仍持續進行中，在本次洽訪會議中，JNSS 表示保安系統合約訂約迄今已超過六年，該公司除了收到合約金額 10%之預付款外，其餘款項如設備款及安裝款均尚未領到，且工期展延費用不斷增加，對該公司造成了很大的財務壓力，故希望本公司能改變合約架構，使其能儘速領到 2008 年 8 月 15 日以前所發生之費用。有關此點，已在會中向 JNSS 說明，合約架構係本公司既定政策且為整體考量，要進行改變較為不易，若 JNSS 希望早日收到付款，則可先交運已製造完成之設備，以便請領設備款。至於 Cost Impact 款項，則仍在議價修約完成後再行支付，故請 JNSS 能再參酌本公司之審查意見，儘速將 Cost Impact Claim 之金額合理化並提供相關證明文件供本公司審查，以便能早日達成協議及完成修約。

- 4、在本次洽訪會議中亦談及有關設備之交運時程事宜，JNSS 表示目前一號機設備已陸續簽署 PQC，由於龍門工地廠房施工狀況尚未 ready for installation，且本合約係設備帶安裝，故 JNSS 將視工地土建施工及其他設備安裝完成情況再進行本合約設備之交運。
- 5、會議結束後，在該公司人員之陪同下，至其 office 參觀並由其技術人員簡介裝置於辦公室之各項人員辨識及偵測裝置及安全防護門等設備。

(二) Mitsubishi Electric Corporation 部份：

- 1、Mitsubishi Electric Corporation(MELCO)成立於 1921 年，員工人數將近 10 萬人，其產品分為能源與電力系統、工業自動化系統、資訊與通信系統、電子裝置及家電設備等五大類，本公司龍門計畫一、二號機主變壓器設備之製造與安裝，係由其能源與電力系統部門承造。(MELCO 之 Profile 如附件二)
- 2、本次洽訪 MELCO 與該公司 Mr. Yamada 及 Mr. Shimizu 等人會談，就設備製造及安裝時程、因核四工期展延導致廠商成本費用增加(cost impact)及保固期展延等議題進行討論。
- 3、在設備製造及安裝時程方面，目前一號機主變壓器已於 6/12/2008 全部安裝完成。二號機方面，目前設備已製造完成，並已於今年 11 月下旬自日本運送至龍門工地，將於 12 月初起進行安裝工作，預計明(2009)年 3 月底至 4 月初即可安裝及測試完成。
- 4、有關因核四工期展延導致廠商提出 Cost Impact 要求事宜，MELCO 於今年 10 月下旬提送 Revised Cost Impact Proposal 至本公司，目前正由本公司相關單位審查中。在本次洽訪會議中，MELCO 針對其 Revised Cost Impact Proposal 提出補充說明，經當場與其 review 結果，發現在其 Revised Proposal 中，廠商仍有多項未依 3/14/2008 會議之結論修改，且有些項目之間仍有重複報支以及佐證資料不全之處，這些發現都已當場告知 MELCO 並請其修正。MELCO 表示將儘速再做修正並於下次來台開會時提出報告及說明。
- 5、有關設備保固期展延方面，本公司已於 10/21/2008 去函 MELCO 告知將一號機設備之保固期展延至 5/1/2012 (NTP+118)，二號機設備保固期展延至 1/1/2013 (NTP+126)，廠商尚未表示同意。本次洽談會議中，再度向廠商說明由於核四工程延後，MELCO 主變壓器之完工日期亦約延後了三年多，若依據現行合約之計算方式，則保固期在設備未開始啓用即已到期，如此不甚合理，且依照工業界之一般慣例，設備保固期應於該設備開始運轉使用後起算，故本公司要求將保固期展延至 FAT 日期之後三年應屬合理，希望廠商能同意本公司之要求。MELCO 表示將會再進行考慮，並建議將保固期展延事宜併入工期展延 Cost Impact 中一併辦理。
- 6、會議結束後，在 MELCO 人員陪同下，參觀該公司之展示室及辦公室，並與相關人員就本合約相關議題交換意見。

參、心得

- 1、本次國外出差已圓滿達成任務，相關之議題均已與廠商洽談及獲得相互瞭解，今後將繼續追蹤，必要時亦將會請相關單位協助處理。
- 2、由於核四工期展延，使得部份外購合約完工日期亦較原合約延後，導致合約廠商因工期展延、費用增加而向本公司提出求償。本次洽訪之二家日本廠商，目前都因工期展延而向本公司提出求償，且由於求償之金額與本公司認知尚有落差，目前尚在交涉處理中。若雙方談判不成，則有可能進入調解或仲裁等履約爭議之程序。
- 3、本次出差共洽訪二家日本廠商，在洽談過程中，二家廠商均表達了對核四工期的關切。因為工期的變動或不確定性，將影響到廠商的履約工作，例如購料時程、製造排程、人員調度、成品儲存等，同時亦有可能產生額外費用，故廠商表示希望工期能儘速確定下來，不要再展延。因此，如何努力使核四工程能夠如期進行，如期完工及發電是本公司各相關單位必須努力以赴的目標。

肆、建議事項

核四工程外購設備採購案共簽訂有七十多個合約，目前有些合約已交貨完畢，有些則尚在履約中，各合約之間介面錯綜複雜，且由於核四工程工期展延，故有很多合約都需要與廠商進行修約。因此與廠商之間的聯繫工作(包括交涉與澄清等工作)甚為頻繁，廠商之履約狀況更須確實掌握。

綜上所述，擬建議本公司應有效掌握施工時程，若有無法如期施作完成時，應於適當時機反映事實及商討解決對策，俾便在公平合理的基礎上與合約廠商洽商契約變更，以確保龍門計畫能順利執行。

Establishment of JNCS

Background of Establishment

Date of establishment on July 21, 1977.

Two years after IAEA recommendations on Physical Protection of Nuclear Materials and in line with Security enhancement policy of the Japan Atomic Energy Commission.

Shareholders

SECOM CO., LTD	50%
Tokyo Electric Power Co., Inc.	25%
The Kansai Electric Power Co., Inc.	15%
Chubu Electric Power Co., Inc.	10%

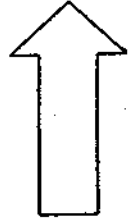
Major Areas of Business

- R&D
- Risk analysis
- Design, procurement, construction and maintenance of physical protection system and related equipment
- Leasing of physical protection system
- Protection service by guards for transport of nuclear fuels and waste
- Security service by guards for nuclear power station
- Training & education program for guards
- Design and supply of physical protection system and equipment for thermal power station, LNG storage, and energy related facilities.
- Design and supply of physical security system for data center.

SERVICES OFFERED

PLANNING

- ◆ Consulting Services
- ◆ Joint R & D with Clients
- ◆ F/S & Project Development



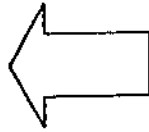
PROJECT EXECUTION

- ◆ Project Planning
- ◆ Project Management & Control
- ◆ Basic Design
- ◆ Detailed Design
- ◆ Procurement
- ◆ QA & QC
- ◆ Construction
- ◆ Commissioning



PLANT OPERATION ASSISTANCE

- ◆ Training
- ◆ Maintenance



Market Share

Physical Protection System for Nuclear Power Stations

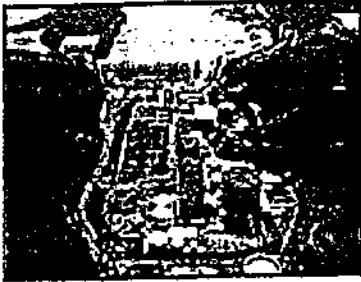
	Number of NPS Sites	Number of Reactors	Installed Cap. (MW)
Total	16	54	47,288
JNSS Share	10	40	37,030
JNSS Share (%)	63%	74%	78%

*Tokai Daiichi Unit No1 (GCR, 166MW) of JAPC decommissioned in 1998 is included in the number of reactors and installed capacity.

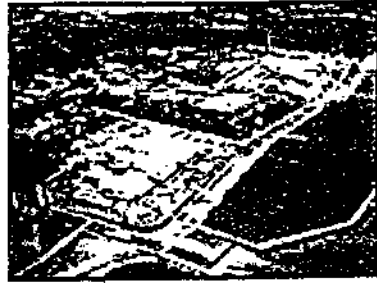
Unsurpassed know-how

Matchless expertise and experience

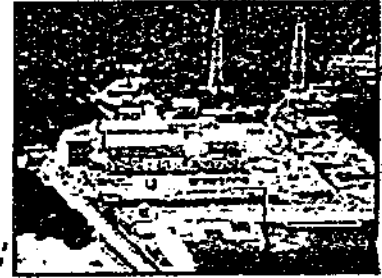
JNSS systems, equipment and personnel protect ten major nuclear power stations accounting for 80% of Japan's nuclear power. JNSS is staffed by over 300 people who are highly motivated and expertly trained to develop and implement protection systems for nuclear and other sensitive and critical facilities.



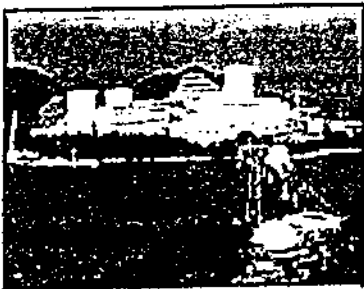
Tsuruga Power Station
(The Japan Atomic Power Co., Inc.)



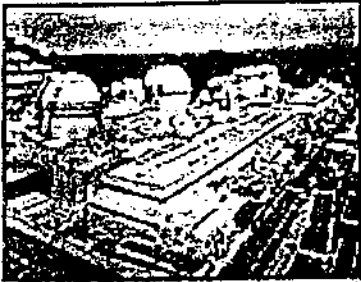
Kashiwazaki Kariwa Nuclear Power Station
(Tokyo Electric Power Co., Inc.)



Onagawa Nuclear Power Station
(Tohoku Electric Power Co., Inc.)



Mihama Nuclear Power Station
(The Kansai Electric Power Co., Inc.)



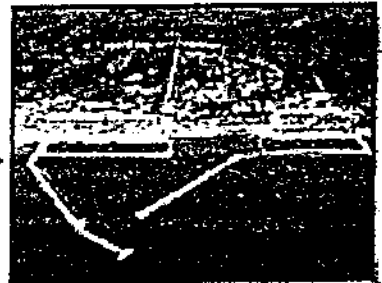
Ohi Nuclear Power Station
(The Kansai Electric Power Co., Inc.)



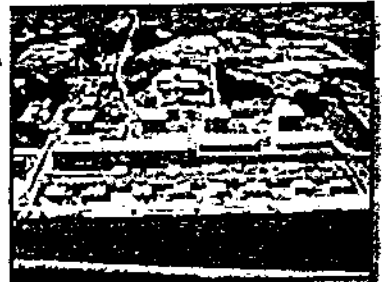
Takahama Nuclear Power Station
(The Kansai Electric Power Co., Inc.)



Hamaoka Nuclear Power Station
(Chubu Electric Power Co., Inc.)



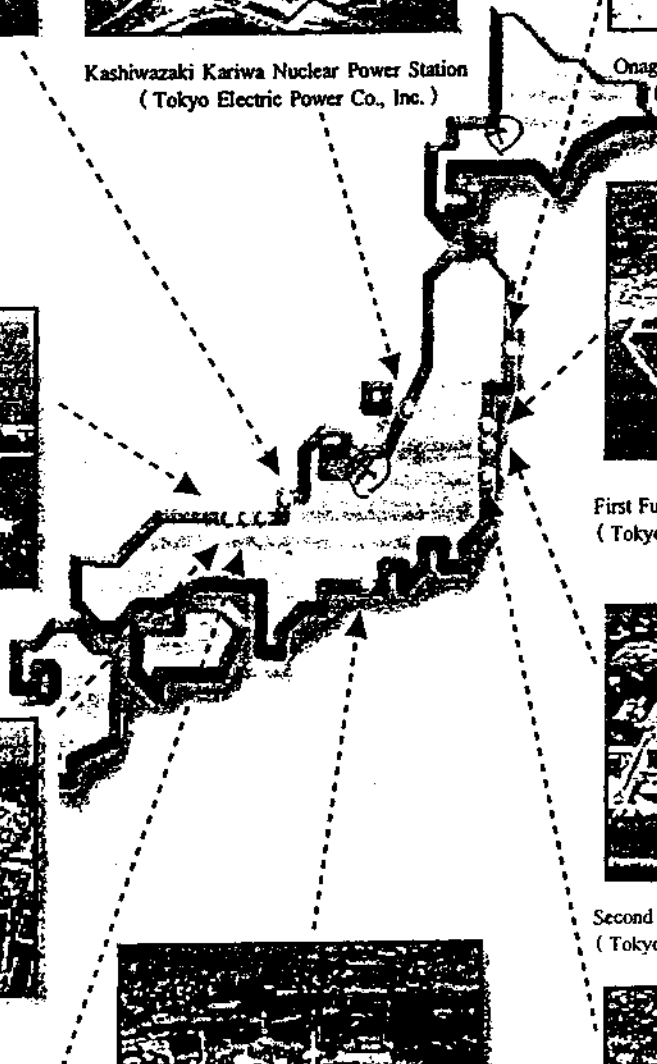
First Fukushima Nuclear Power Station
(Tokyo Electric Power Co., Inc.)



Second Fukushima Nuclear Power Station
(Tokyo Electric Power Co., Inc.)

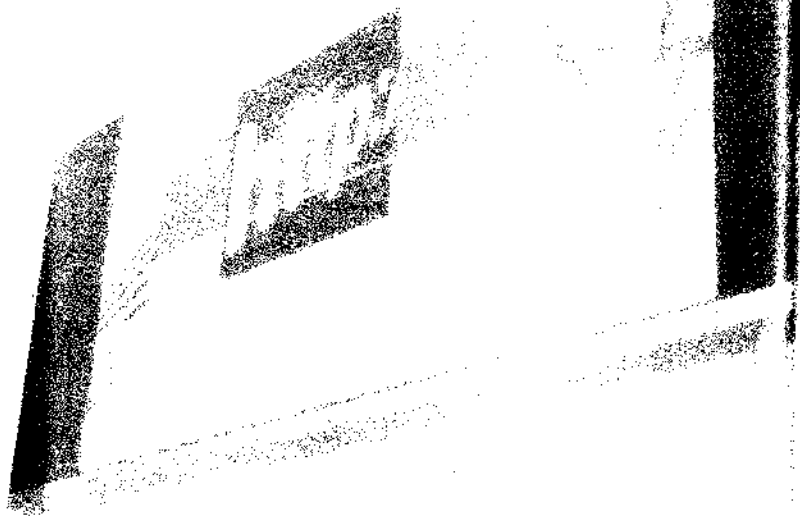


Tokai Power Station (left)
and Second Tokai Power Station (right)
(The Japan Atomic Power Co., Inc.)



ENERGY AND ELECTRIC SYSTEMS

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The social infrastructure systems business saw increases in both orders and sales from the previous fiscal year due to reintegration of the electric transmission and distribution related businesses, in addition to expansion in the overseas business for electric equipment for rolling stock. The building systems business experienced an increase in both orders and sales from the previous fiscal year due to an increase in domestic large-scale orders for elevators and escalators, in addition to rising demand in India and the Middle East.

As a result, sales in the Energy and Electric Systems segment climbed 10% to ¥868.8 billion. Operating income decreased ¥2.9 billion to ¥25.3 billion owing to a decline in sales prices and other factors compared to the previous fiscal year.



Terminal Radar Information Processing System

The world's first air traffic control display equipment to employ a wide, high-resolution LCD (2048 x 2560 dots). Its exceptional visibility contributes to greater safety.



Diamond Vision

An ultra-high-definition (3mm pixel pitch) indoor LED screen for Deutsche Telekom, one of Europe's largest telecommunications companies. The tolerance for each LED pitch is less than 1mm. The world's largest-class indoor screen (3.3m x 5.8m) with full high definition capability, it provides the ultimate in image quality.



Shizuoka Cancer Center Proton Therapy System

This cutting-edge therapy system uses linear protons and heavy-particle beams for the targeted destruction of affected areas. Easy on patients, this treatment method is expected to help improve quality of life.



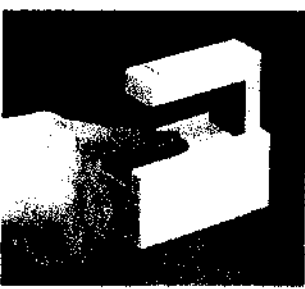
Power Plants

Mitsubishi Electric power plant installations are used by power companies and as in-house power generators in various industries. Proven in the field, they are optimal power plants for hydroelectric, thermal and nuclear applications.



Machine-Room-Less Elevator AXIEZ

The latest standard type elevator series AXIEZ features improved space savings, riding comfort, and application of universal design, as well as advanced variable-speed control, which significantly reduces waiting and riding time.



Finger Identification Device by Penetrated Light

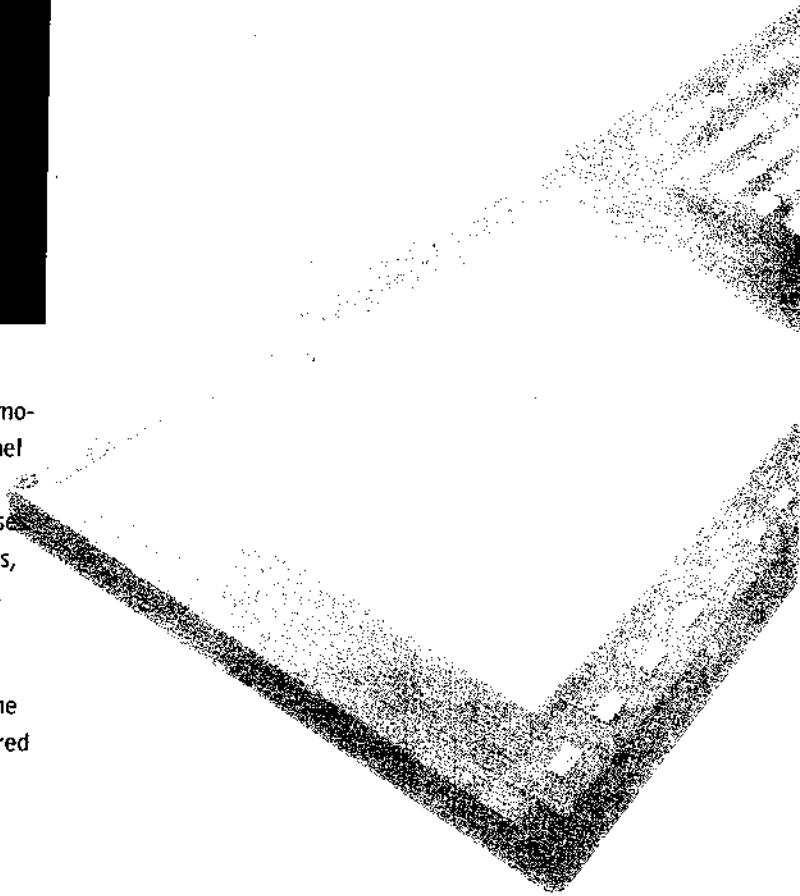
Mitsubishi Electric developed and introduced a new fingerprint sensor that accurately reads "inner skin fingerprints" regardless of cuts or changes to the surface skin of a finger. It is also a non-contact type, which enhances user convenience and allows freedom of finger placement.

INDUSTRIAL AUTOMATION SYSTEMS

The factory automation systems business posted gains in orders and sales due to increased investment by the automotive industry in Japan and overseas, as well as by flat-panel display-related businesses in Japan, Korea and Taiwan.

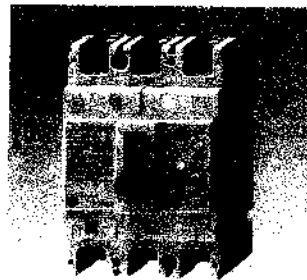
The automotive equipment business also recorded increase in orders and sales due to stronger demand for alternators, starters and other equipment from domestic and overseas auto manufacturers.

As a result, sales in the Industrial Automation Systems segment climbed 10% to ¥860.1 billion. Operating income totaled ¥96.0 billion, an increase of ¥23.6 billion compared to the previous fiscal year.



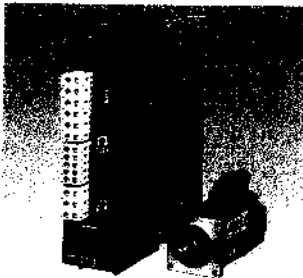
Computerized Numerical Controllers

The world's first equipment for effective control at the nanometer level, enabling faster and more precise processing. They contribute to higher productivity in automotive, IT and other industries.



Circuit Breakers

The World Super series circuit breakers features protection of transmission lines and prevention of electrical leakage, enabling a very stable supply of electricity. Designed to both Japanese and international standards for worldwide applications.



AC Servos

Delivering the industry's top-class speed and performance to improve capacity utilization rates and add value to manufacturing facilities. Used in semiconductor manufacturing, materials handling equipment, industrial machinery and other industries.



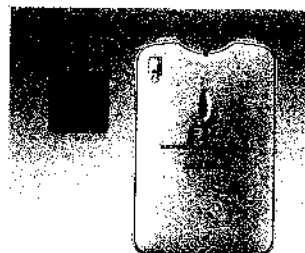
Programmable Logic Controllers

The MELSEC series of programmable logic controllers supports production lines ranging from simple process control to complete machine control. Japan's top brand, they play a key role in leading-edge, reliable manufacturing facilities.



HDD Car Navigation Systems

Newly developed driving controller allows operation without looking at the screen. Allows easy, safe and comfortable destination access information and hands-free music and mobile phone manipulation.



ETC Equipment for Vehicles

ETC equipment with an attractive, stylish appearance and a thin, compact body. It fits naturally into sophisticated auto interiors and contributes to a more pleasant and comfortable driving experience.

INFORMATION AND COMMUNICATION SYSTEMS

The telecommunications business saw an increase in orders and sales compared to the previous fiscal year as a result of stronger demand for 3G mobile handsets and optical broadband access system products in Japan. The information systems and services business posted a sales increase due to growth in the systems integration business. In the electronics systems business, orders increased from the previous fiscal year due to orders for the Superbird 7 satellite. However, sales remained the same as the previous fiscal year.

As a result, total sales for the Information and Communication Systems segment showed an increase of 5% from the previous fiscal year, finishing at ¥644.1 billion. Operating income increased to ¥20.7 billion, up ¥20.4 billion from the previous fiscal year owing to improvements in the mobile handset business.



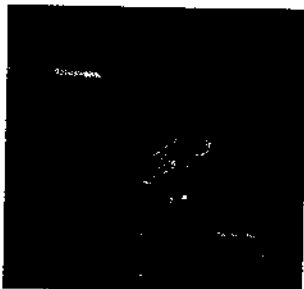
Information Protection Solutions

Advanced solutions for the era of heightened information protection needs through MISTY encryption and other coding technologies. They have proven track records in use at both government and financial institutions.



Integrated Control Center

This Center of Mitsubishi Electric Information Network Corporation operates and monitors customers' systems 24/7/365 and boasts state-of-the-art security services. It helps reduce customer costs and brings them peace of mind.



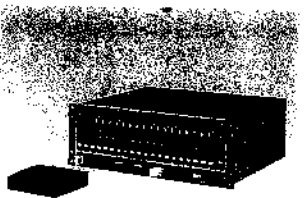
Superbird 7 Communications Satellite

Employing the Mitsubishi commercial satellite platform DS2000, this is the first commercial communications satellite developed in Japan. We're in charge of the satellite's design, manufacture, testing, and launch, as well as the construction of satellite control facilities and the satellite's in-orbit testing. Delivery is planned for 2008.



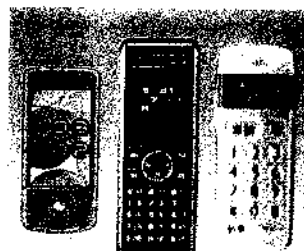
AQLOC High-Performance, Bluetooth-Compatible GPS Receivers

A highly accurate GPS receiver compatible with Bluetooth. AQLOC can link wirelessly to a number of devices. Its compact, water-resistant design makes it suitable for use outdoors even during inclement weather. It can be used for routine maintenance, shipping operations, and more.



Optical Broadband Access Systems

Mitsubishi Electric's Passive Optical Network (PON) systems let communications carriers create economical access networks that satisfy the growing demand for broadband services. As data volume expands with the increasing number of video content services, PON is helping to support the creation of a fully-networked society.



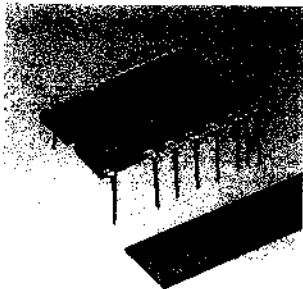
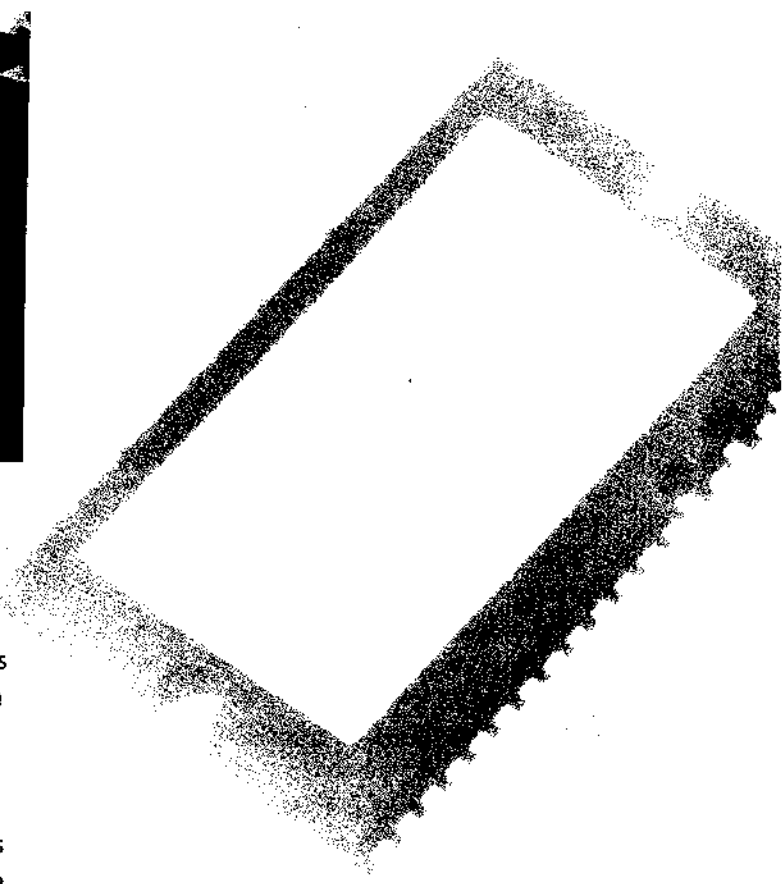
Mobile Handsets

Mitsubishi Electric develops and markets an array of FOMA* handsets, from the slim, wide-screen, slide-open types, to the call-only variety designed for simplicity and peace of mind. Our handsets are helping to spread the popularity of 3G services.

ELECTRONIC DEVICES

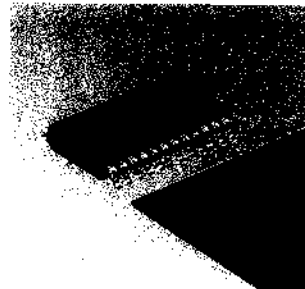
The semiconductor business saw an increase in both orders and sales from the previous fiscal year due to increases in power modules for hybrid cars and domestic industrial machinery, as well as red laser diodes for recordable DVD players. The liquid crystal business saw a decrease in orders and sales from the previous fiscal year. Despite increases in small- and medium-sized products for industrial use, there were decreases in large-sized products for PC monitors.

As a result, sales for the Electronic Devices segment totaled ¥170.4 billion, an increase of 4% from the previous fiscal year. Operating income was ¥13.5 billion, an increase of ¥7.4 billion compared to the previous fiscal year, owing to the increase in sales.



DIP-IPM Ultra-Small Package Version 4 Series

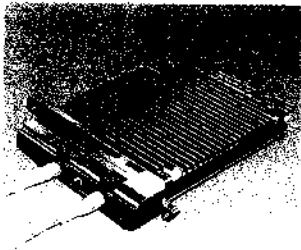
By using high-heat radiation insulating sheets, Mitsubishi Electric has decreased the size of packaging for inverter products to 60% (15A/600V) of conventional size, making it possible to reduce the dimensions of inverter products for home electronics. The packaging is eco-friendly and completely lead-free.



1200V HVIC for Inverter Systems

Mitsubishi Electric-developed HVIC*1 technology drives semiconductor elements for switching on AC400V outlet inverter systems. It boasts the industry's leading voltage resistance, able to withstand 1200 volts. Compliant with RoHS*2 standards, it can also be used with products destined for overseas markets.

*1 HVIC: High Voltage Integrated Circuit
*2 RoHS: European Union directive on "restriction of the use of six certain hazardous substances in electrical and electronic equipment"



MF-10KSXB Series 10 Gbps Optical Receiver-Transmitters

This compact series is compatible with XFP* electrical connection parameters. Capable of sending 10Gb of data over an impressive 40km distance every second, it is meeting new needs as optical networks continue to expand.

*XFP: A standard for optical receiver-transmitters established by manufacturers of optical communication-related equipment for the purpose of realizing a common format for data transmission standards such as ITU-T, 10Gbps, 10Gbps Ethernet and others.



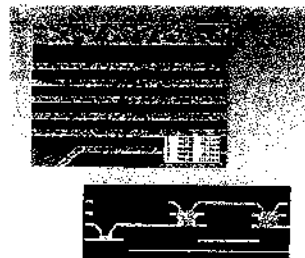
Power Amplifier Module for GaAsHBT Transmission with W-CDMA Format Mobile Handsets

The industry's most compact power amplifier modules for sending data through W-CDMA format multi-band mobile handsets. These modules will help to make mobile handsets more compact and slim.



Transflective 8.4-inch VGA Color LCD Modules

Modules that display brilliant colors even in bright outdoor light by utilizing the transflective LCD format, which combines both transmissive and reflective format properties. They achieve the industry's top-rated contrast ratios of 200:1 (transmissive) and 20:1 (reflective) and are easy to view from almost any angle.



All-Glass Cloth Epoxy Buildup Substrates

Slender, extremely high-density, all-glass cloth epoxy buildup substrates that are optimal for mobile information devices. Four layers are just 0.25mm thick, and eight layers are a mere 0.55mm thick.

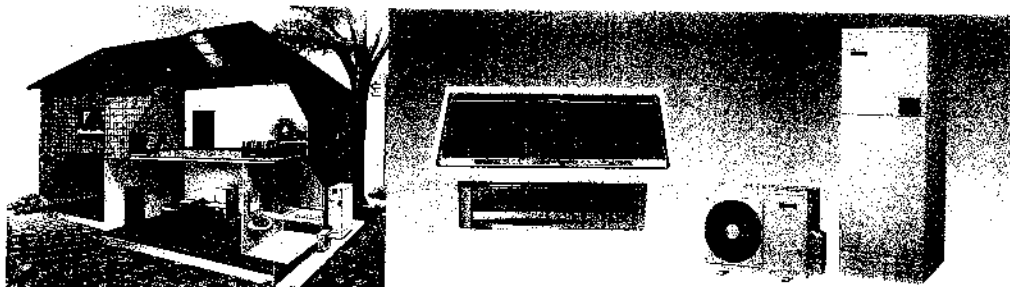
HOME APPLIANCES

Sales in the home appliances business rose 3% from the previous fiscal year to ¥896.4 billion due to increases in room and package air conditioners for both the foreign and domestic market. Increases were also seen in residential home equipment such as solar power generation systems, electric water heaters and IH cooking heaters, as well as in refrigerators and LCD televisions. Operating income finished at ¥15.0 billion, a decrease of ¥10.7 billion compared to the previous fiscal year, owing to a decline in sales prices.



Uni & Eco Home Appliance Lineup

Mitsubishi Electric's commitment to realizing a sustainable society is reflected in its "Uni & Eco" products. These products are energy- and resource-saving, incorporate advanced recycling technologies, and have been designed for ease of use by all. ("Uni" stands for universal design and "Eco" stands for ecology.)



All-Electrified Housing Products

Working to achieve co-existence with the environment and adhere to a recycling-oriented society, Mitsubishi Electric strives to create high-quality, long-lasting products for all-electrified housing products. Advances include enhanced safety, convenience and comfort.



Digital AV

We have created eco-friendly digital AV products for markets in Japan and the United States that go beyond the concept of universal design. In the U.S., we are combining our latest large-screen TV technologies with our home AV-network systems.



DLP Display Wall

Our high-quality image technologies deliver exceptionally sharp color reproduction, with product variations developed to suit almost any user need. These systems are being utilized in Japan and abroad for large screens that display images, data and information.

Basic Corporate Governance Policy

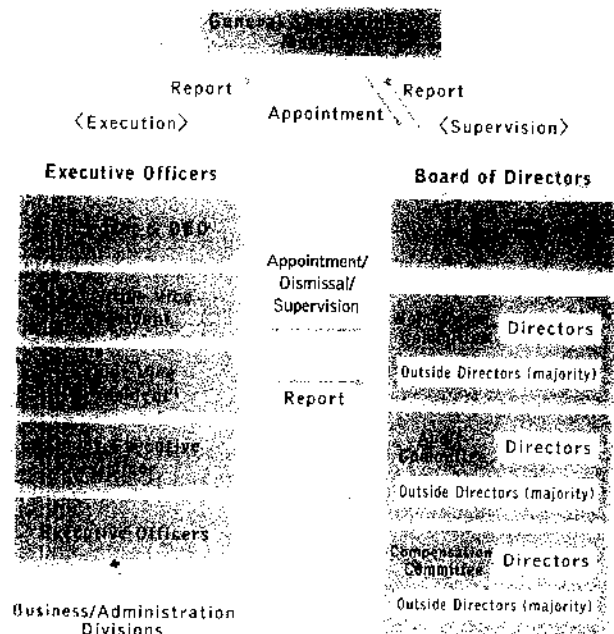
Mitsubishi Electric strives to pursue continuous growth by enhancing flexibility in its operations and by promoting management transparency. At the same time, the Company consistently endeavors to reinforce the supervisory functions of management. Our basic policy consists of the establishment of an efficient corporate governance structure that is responsive to various expectations from diverse stakeholders (including both customers and shareholders, among others) and through this, we aim to boost our corporate value.

Current Status of Implementation of Various Measures Relating to Corporate Governance

Company Organization and Development of Internal Control Systems

In June 2003, Mitsubishi Electric reformed its management structure when it changed its corporate structure to a committee system. The supervisory and executive powers of management were thus separated, with the board of directors handling supervisory decisions and executive officers handling executive decisions.

The present board is comprised of twelve directors (five of whom are outside directors) offering advice and supervision to management from an objective standpoint. The board of directors has three internal bodies: the Nomination, Audit and Compensation Committees. Each body has five members, three of which are outside directors. The Audit Committee has its own dedicated, independent support staff.



A key feature of our management structure is the separation of the Chairman and the CEO, with the Chairman acting as head of the supervisory functions as a member of the board of directors and the

President & CEO acting as the head of the executive officers.

Neither the Chairman nor the President is a member of the Nomination or Compensation Committee. This clear separation of supervisory and executive powers makes our corporate governance more effective.

To maintain compliance and secure management efficiency, each executive officer possesses responsibility for their individual scope of duties, with operating conditions being audited by internal auditors (Corporate Auditing Div.). The internal auditors and outside auditors report their audit results to the Audit Committee and executive officers in charge.

Development of Risk Management System

The risk management system is constructed so that each executive officer possesses responsibility for his assigned duties. In addition, important management implementations are discussed and decided by all the executive officers in the executive officers' meetings. The synergistic effect of all executive officers participating in management and information creates a multi-dimensional risk management system.

Internal Audit and Inspections by the Audit Committee and Independent Auditors

The Corporate Auditing Div. conducts its internal audits from a fair and impartial standpoint by having its own dedicated staff, in addition to supporting auditors that represent the special interests of relevant departments.

The Audit Committee consists of five directors, of which three are outside directors. In accordance with the policies and assignments agreed to by the committee, inspections are conducted by competent members into the performance of the directors and executive officers, as well as affiliated companies.

The Audit Committee receives reports from the internal auditors (Corporate Auditing Div.) and exchanges information through a series of periodic meetings and discussions on auditing policies. In addition, the Audit Committee has the opportunity to discuss policies and methods of audits with independent auditors, and it will receive reports on the status and results of the audit, along with the mutual exchange of opinions.

KPMG AZSA & Co. has been retained as the independent auditor. KPMG AZSA & Co. appoints partners in charge, and the firm has designated Mr. Yoshihiko Nakamura, Mr. Hiroto Kaneko, and Mr. Ryoji Fujii as the partners in charge of handling the auditing of Mitsubishi Electric. Support staff for handling the auditing tasks will consist of appropriate CPAs and JAs from KPMG AZSA & Co. Mitsubishi Electric will maintain an environment in which fair and impartial audits can be conducted, and that includes providing relevant management information to KPMG AZSA & Co.

